



Health Research Board  
**TMRN**  
Trials Methodology Research Network

2019



# START Competition 2019

STEP BY STEP GUIDE FOR TEACHERS AND STUDENTS



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Schools Teaching Awareness of Randomised Trials



## FOR TEACHERS

# Project Structure and Overview

Please read over the recommended step by step guide below. We have outlined a difficulty rating and also an estimated time frame for each step, however you can spend as much or a little time on each step, some trials will be straight forward compared to others, so it is really up to you how much time you spend on each step.

## Step 1

### Decide on your trial question

1-2 hours



DIFFICULTY

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All good trials start with a good relevant question, that you should be able to answer within the project timeframe. Think about what is going on in your own life now: Are you about to prepare for a sporting event? Are there exams coming up? Have you ever wanted to know more about something, but wanted real proof about it?

See below some suggestions for your research question. You can use any of these examples or, even better, come up with your own question.

Can healthy eating posters improve the quality of school lunches?

Can using coloured paper for written spelling tests increase students' scores?

Does 10 minutes of dancing every morning before classes improve student's attention?

Can playing scrabble at school or at home help improve spelling scores?

Can having classes outside help students attention during class?

Can listening to music at lunch time help reduce stress at exam time?

Can juggling for 5 minutes a day for two weeks increase teachers hand eye co-ordination compared to teachers who do not juggle?

Can drinking cranberry juice for a week reduce teacher's dental plaque (as tested using a plaque-disclosing tablets)?

Can reciting poems in a room with air fresheners help students remember the poems better than reciting poems in a classroom without an air freshener?

Does doing 20 jumping jacks every day at school result in increased fitness?

Do meditation sessions at lunchtime help improve students test scores?





## Step 2

### Register your trial

30 minutes



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Before they can start, all clinical trials are registered on a public website. This is so that everyone knows that the trial is going to take place. This prevents the same trials being repeated unnecessarily. We would like you to register your trial with us in the same way.



To register your trial please complete the Trial Registration Form and email this to [hrb-tmrn@nuigalway.ie](mailto:hrb-tmrn@nuigalway.ie). This allows us to know who is taking part so we can provide assistance if needed.



You can also post this form to the HRB-TMRN at:  
Room 235, 1st Floor, Áras Moyola, School of Nursing and Midwifery, NUI Galway

## Step 3

### Select your outcomes

1 hour



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You now have a great and interesting question to study. But how will you answer this question? and how will you measure any impact?

To do this you must collect information from people who took part in your trial and compare the results.

#### Example 1

Can using coloured paper for written spelling tests increase students' scores?

Compare the average test scores of students that used coloured paper to do their tests with the average test score of those that used regular paper.

#### Example 2

Can healthy eating posters improve the quality of school lunches?

Count the number of "healthy items" in school lunch boxes each day, pieces of fruit, bottles of water, healthy sandwiches for example.

#### Example 3

Can having classes outside help students attention during class?

You could also ask participants to answer some written questions (this is called a 'survey');

You could ask questions of those who are taking part in your trial every afternoon about how much attention they paid in class that day. Remember try to use general open questions and try to avoid influencing the answers you get. For example, you may really like having classes outside, but to fairly test this, you should keep your own opinions secret.



## Step 4

### Identify who is taking part in your study

1 hour



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Who is going to take part in your study? Another class? Your own class or family? Teachers in the school? Once you select your group, you need to explain the study to them and ask them to take part. You need to tell them **every detail** about the study and leave nothing out. This is a very important step. Explaining it properly can mean a big number of people taking part, explain it badly and no one will want to take part in your trial. Plan how you will “sell” the idea of taking part in this trial. The people taking part are now called **Participants**. You need to get each participant to sign a “consent sheet”. This means that they have given you written permission to take part and that they fully understand what they have to do. See the Consent Sheet Example.

## Step 5

### Divide up your participants into groups

1-2 hours



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So now you need to divide up your trial subjects into **groups**. One group will need to be the **control group**, any other groups can be **test groups**.

**The test groups will do what you are investigating (e.g. use coloured paper).**

The control group will not do anything differently. You will still collect information from them, however they will not be involved in taking part in the test you are interested in. You will compare the results of this group with the test groups.

To randomly assign your Trial Participants to the different groups, ask **someone not involved** with the project to pull participant names out of a hat or to toss a coin. You could ask a parent, another student from a different class or the school Principal to do this.

## Step 6

### Make it a secret (If you can!)

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Is it possible to prevent the control group from knowing what the test is? Can you keep your test a secret? If so, this means your results will be **extra reliable**. Because you will have stopped people in the **Control group** from becoming part of the test. In some tests this is very hard to do, in others it is easier. See if you can do this for your trial.





### Step 7

#### Conduct your study

1-2 weeks



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So now you are good to go! Work with your Trial Participants and teach them what they need to do. There are various ways you can do this; you could have a class meeting or you could give them written instructions. Decide the best way of talking to them. Start collecting any information you need to see if your test is having any difference. Communicate with those involved every day. Ask them how they are getting on. Is there anything you can do to make things easy for those doing the test? Think about how will you record your results? In a notebook or laptop?

### Step 8

#### Report your findings

1 week



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What information did you collect? Does it suggest that your test was positive or negative? Remember if you found no difference it is still an important result. Will you write this as a report, or record a video? Will you create a poster or piece of art to show what you learned? Tell us all about your trial, not just the results. Did you have fun doing this project? What was difficult? What was easy? Share all of your findings just like a real life trial would. Don't forget to share your findings with those that participated, as well as your friends and families.





## Support

Remember you can contact the Trial Ambassadors at any time to discuss your ideas or ask for help!



### Trial Ambassadors

The START competition has the help and support of trial ambassadors, who are PhD students involved in conducting clinical trials. Feel free to contact them by phone or email to discuss any issues you encounter. You can also contact the HRB-TMRN at **091 494492** or [hrb-tmrn@nuigalway.ie](mailto:hrb-tmrn@nuigalway.ie) to discuss further.

